newSCIENTIST

Index Volume 33

5 January — 30 March 1967

Editorial Offices:

Cromwell House, Fulwood Place, High Holborn, London, WC1

Number	Date of issue	Page numbers
528	5 January	1-64
529	12 January	65-120
530	19 January	121-184
531	26 January	185-248
532	2 February	249-312
533	9 February	313-376
534	16 February	377-440
535	9 March	441-504
536	16 March	505-592
537	23 March	593-648
538	30 March	649-704

SUBJECT INDEX

Academic freedom, dangerous erosion of 189
Accelerometer for very small forces 204
Accelerator, 200 GeV, site for 18
Accidents, on motorways, effect of speed limits 628
road, statistics on 225
Advance into the unknown (film) 35
Advertisement, brain drain to US 383, 420, 629
Aerial, plasma sheath for better tuning 401
Aerial spraying using Decca Navigational system 447
Aerosol generator, electricity by 254, 420
"Aerospike" rocket engine 20
Aérotrain system (France) 30
Aflatoxin, rapid test for 158
Africa, meat shortage in 625
water supply problems in 625
Ageing, psychology of 480
research on 160, 291, 481
Air, odours, filtering of 400
steady state of 199
Air bus, prospects of 655
Air castor for hand truck 144
Air-flow measurement through heat-exchanger 610
Air traffic control, automated 612
Air traffic control centre, Eurocontrol (Brétigny) 134, 356
Aircraft, air bus, prospects of 655
BAC One-Eleven short-haul airliner, "stretched" version 9, 290
blind landings, position of 384
Concord supersonic airliner, fatigue test monitoring by computer 78
prospects for 5
helicopter service, Waterloo-Heathrow 127
helicopters, blade slap noise 333
icing test rig for 203
Mi 10, demonstration of 602
tree pruning by 84
parking problems with jumbo jets 21
servicing powered from underground unit 537
STOL, thrust increase from blown flap 271
supersonic transport, prospects for 5
swivelling undercarriage for jumbo jets 129
US supersonic transport, Boeing-GE 96
Aircraft engines, noise reduction of 320
Aircraft noise, problems of 72
Airport, London, (Heathrow), helicopter service to Waterloo 127
(Stansted) 320
Airport organisation, problems of 72
Algae as source of protein and vitamins 270
Allium, sclerotia germination of 343
Alpha-particles, part of cosmic radiation reaching earth 413
Aluminium alloys, welding of 599
American Association for the Advancement of Science, annual meeting (Washington) 34
Amphetamine drugs, effects of 599
Amplifier, planar turbulence 143
Anaemia sickle cell, research on solubility 471
Animal diseases, transmitting to man 625
Animal species, geographical influence on 546
Animals, for Export Bill 253
prehistoric, theories on growth 447
24-annulene, ring-compound 152
Antarctic research, Japan 217
Antibiotics, from the sea (film) 35
indiscriminate use in farming 5, 101, 226
insect pests control by 656
Antimatter, gravitational force experiments 32
Ants, study of male species 472
APEX computer programme 338
Aphid wing formation in crowded environment 546
Apollo spacecraft, continuation of Moon programme 254
future programme of 396
Apollo spacecraft disaster, effects on space-race 324
NASA recommendations on 474
report and effects of 396
Armament, automatic transfer between ships at sea 398
Arms race, cost of 225
Aromatics, stability of 343
Art forgeries, new detection techniques 622
Arteries, high-pressure jet clearance 598
Arthur, King. See Camelot
Artificial leather for shoe uppers 618
Artificial limbs, research on 135
Asbestos dust, effects on health 453
Asian tree-shrew, breeding pattern of 661
rearing and studies of 661
Aspergillus flavus food contaminant 156
Assembly of components by impact mounting 85
Assembly-line workers, production research on 319
Asthma, electrosleep in treatment of 472
Astronauts, recruitment of 349
Astronomy and astro-physics 422
Athens deslating plant 614
Atmosphere, dangerous, electrical barrier for controlling 539

Atom, putting it to work (film) 284
Atomic Energy Research Laboratory, research diversification plans 383
Atomic numbers, higher, half-lives 413
Autobiography of Bertrand Russell 687
Automatic assembly, conference on (Nottingham) 15
economics of 15
Automatic control of underground railways 669
Automatic draughting machine 329
Aviation, Ministry of, fusion with Ministry of Technology 320
Azerbaijan longevity factors 656

Baby, unborn, effect of viruses on 654
foetal therapy applied to 194
BAC One-eleven short-haul airliner, "stretched" version 290
Bacteria, living off bacteria 282
Barrier, electrical, for controlling dangerous atmospheres 539
Bat, fossil, 50 million year old 8
homing instincts of 545
Bdellovibrio bacteriovorus, parasitic bacterium 282
Bed, hospital design and development of 463
Beef production, effect of slatted floors 331
Berkeley rebels (film) 35
Biological warfare 196
research, Pennsylvania University 668
Bird identification by radar 19
Bird-watching in London and New York 385
Birds, population density of 411
Birkbeck College, future and activities of (report) 190
Blackbirds, population density of 411
Blackness in animals and humans 128
Blind landings, position of 384
Blood-brain barrier 94
Boats, sailing, research on 201
Body-warmer for troops 256
Boiler-water, oxygen-meter for 610
Bone, piezoelectricity in 219
Bone injury, effects on metabolism 345
Brain, Lord, death of 43
Brain drain, from Japan 217
to US, advertisement 383, 420, 629
Brain function, theories of 600
Branding of cattle, permanent 669
Brazil, university staffing problems 536
British Airports Authority, activities of 72
British Association for the Advancement of Science, comment on 43
British Computer Society, list of courses 317
British Hovercraft Corp., activities 527
British Nuclear Forum, nuclear power export 533
British Petroleum Co. purchase of Distillers Co. 156
British Schools Council, publications 7
British Scientific Instrument Research Association, electronic equipment information bureau 452
Brown, I.D., driving for long periods 601
Bubble blowing process, liquid metal 611
Bufo, species of 220
Buoys, terminals for pipelines and tankers 400
Burkitt's tumour, radiation treatment as cause of leukaemia 343
Butter spreadability experiments 6

Cadbury hill-fort, archaeology of 600
Calendar, rearrangement proposals 98, 227
Calliphora structure of eye 547
Camelot, archaeology of 600
Camera, 3-D, prospects of cheaper development 461
Camera shutter, new mechanism development 460
Camponotus herculeanus 472
Camponotus liqniperda, study of male species 472
Can damage, condensation cause of 273
Cancer, chemical treatment hopes 45
zinc test for diagnosis of 152
Capstan, helical warping 83
Car exhausts, effect on weather 33
Carbon monoxide for petrochemicals 385
Cardiographic portable instrument, development of 538
Cardiovascular disease, effect of water hardness 318
Cargo, automatic transfer between ships at sea 398
Carnegie Institution, annual report 18
Carpet, Hartuft low-price hardwearing 671
Castor, air, for hand truck 144
Cattle, branding of, permanent 669
Cave-dwellers, circadian rhythms of 350, 481
Cawood, Sir Walter, obituary 550
CCC chemical, treatment of wheat crops 333
Cell, plant, examination by freeze-etching techniques 658
Central Advisory Council, for Science and Technology, formation of 192
on Scientific Policy, proposals for space agency 445
Central heating from lights 255
Central Unit for Scientific Photography 459
Ceramics cutting by sandblasting machine 538
Ceramics Research Centre, Harwell, formation of 394
Cheese, continuous manufacture 540
Chemical plant use of micro-logic circuits 269
Chemical reaction at high temperatures 539
Chemical warfare 196
Chemicals as petroleum products 156
Chemistry, lasers as aids to 329
organic, nomenclature 628
Chemists, education and training (conference) 72
Children, and their primary schools, Plowden report on 70
handicapped, education in Czechoslovakia 345
malnutrition in 221
Chlormequat treatment of wheat crops 333
Cicada-killer wasp, human being as territory 34
Circadian rhythms of cave-dwellers 350, 481
Civil Service, Royal Society recommendations on 523
Claymore weapon 44
Clothes, paper, practical use of 319
CO_2 lasers, growth of algae in machines 550
Coatings, wear protective 671
Cocoa, inhibiting effect on teeth 670
Cocoa Mirid plant sucking bug, water needs of 341
Cold drawing, lubricant for, of refractory metals 22
Colour differences, eye measurement of 94
Comet, Tuttle's, observations on 655
Comet grain in cast structures 202
Communication network for solar system 679
Communications satellites. See Satellites
Computer programming in schools 36
Computers, aid to visual displays 404
APEX programme system 338
drug toxicity and prescription data by 73
EELM 4-70 and 4-75 130
fatigue test monitoring for Concord airliner 78
gold deposits forecast by 203
lens development by, cost reduction 271
Minsk 22, for Czechoslovak food industry 84
pictorial information handling 205
reducing working day in United States 625
staff training for future needs 317
US federal tax returns 524
Computing Centre, Edinburgh 130
Concert Hall, acoustic design of, GLC 255
Concord supersonic airliner, fatigue test monitoring by computer 78
prospects for 5
Condensers in steam-plant research 540
Conservation of wild life 7
Control, automatic of underground railways 669
Conveyor, Hydrolift, for solids as suspensions in water 142
Cooker, solar 144
Copepod, effects of algae on 473
Copper, tarnish prevention by Incralac lacquer 272
wire production research 330
Coronary thrombosis, effects of affluence 542
Cosmetic curry, last word on 193, 355
Cosmetics, factory, last word on 657
Cosmic dust, metallic constituents, identification of 546
Cosmic radiation reaching earth, alpha-particles part of 413
Cosmic rays, dating by radioactive particles 389
effects on human beings 418
Cosmos 146, orbital information on 656
Cow Green reservoir project 392, 555
Cows, productivity prospects 541
"CP" symmetry law for particle interactions 624
Crab-eater seal 130
Creativity in scientists, assessment and fostering of 416, 481
Creswellians, origins and discoveries of 654
Criminal behaviour, influence of genetic abnormalities 524
Crushing, electrohydraulic, of solids 82
Crystals, single, cutting machine using terylene thread 610
optical mixing processes 609
shape measurement 545
Curie convertor, magnetic engine 332
Curry, cosmetic, last word on 193, 355
Cutting machine, single crystals, using terylene thread 610
Cynognathus, evolution of 535
Czechoslovakia, education of handicapped children 345
polluted rivers 345

Death, artificial revival 257
nature of, and man's struggle with 86, 358, 481
Death rates and population expansion 34
Decca Navigator system for aerial spraying 447
Decoupling, disarmament contention 96
Defence programme, United States, costs for 1967 340
Deficiency disease and intelligence 72
Dehydrated foods, research and development 352
Dental caries, inhibition by vanilla and cocoa 670
Dental porcelain, development and sales prospects 446
Dental X-rays of mummies 614
Desalting plant, Athens 614
Detergents, dirt-removing action on fabrics 84
Diabetes, genetics of 8
Diadème satellite for laser tracking 386
Diet, effect on intelligence 356
Diffusion plants, USAEC disposal consideration 146
Disabled persons, aids for 135
Discs, free-spinning, as aid to sidewall drag on Hovercraft 399
Disease inhibiting agents, spermine and spermidine 623
Diseases, animal, transmitting to man 625
Distillers Co., purchase by British Petroleum Co. 156
Diver, robot, for sampling seabed 401
DNA in viruses 93
Document recording with laser beam 82
DOFIC Gunn effect devices 205
Dog-whelks, behaviour studies 319
Draughting machine, automatic 329
Drill, rock, rocket-powered 130
Driving for long periods, effects of 601
Driving licence regulations for epileptics 449
Drug toxicity and prescription data by computer 73
Drugs, amphetamine, effects of 599
indiscriminate use in farming 5, 101, 226
LSD, effects and problems of 479, 657
psychoactive, social use studies 128

Earth's interior, research into 530
Economics of progress 653
Edinburgh Regional Computing Centre 130
Education, history of four revolutions 285, 419, 555, 684
machine aids for 285, 419, 555, 684
mass indoctrination 317, 555
of handicapped children in Czechoslovakia 345
EELM 4-70 and 4-75 computers 130
Eggs, coating for preservation 85, 291
Egypt, dental X-rays of mummies 614
preservation of mummies 283
Einstein's theory of gravitation, Sun's shape effects on 326
Electric arc furnaces, ERIC controller for 203
Electric field manipulation of fluids 664
Electrical barrier for controlling dangerous atmospheres 539
Electrical energy supplies in Pakistan 100
Electrical pulses, sleep inducement by 399
Electricity by aerosol generator 254, 420
Electrogasdynamic generator, design and development of 615
Electrogasdynamics, development and commercial value of 615
Electrohydraulics, crushing of solids 82
stripping of metal coatings 400
Electron microscope, development and sales prospects 604
Electron microscopy, structure of plant cells 658

Electronic beam, magnetic field effect of 471
Electronic equipment information bureau, formation of 452
Electronics for libraries 386
Electroplating, two-phase coating 332
Electrostatic precipitators, gas removal by 270
Electroviscous fluids, application prospects 664
Elements, heavy, half-lives 413
Elephants, Naumann species, fossil findings in Japan 599
Emlen, J.M., influence of genetics 191
Energy storage by trapped flux in superconductors 92, 289
Engine, internal combustion, using light or heavy fuel 397
rotary, development of new 609
Engineers, emigration to US, advertisement 383, 420, 629
English words, respelling of 482, 630
Environmental Science Services Administration, formation of tsunami information centre, Honolulu 668
Enzyme penetration of eggs 283
Enzyme reactions, magnetic field effects on 93
Epileptics, driving licence regulations for 449
ERIC controller for electric arc furnaces 203
Espionage and industry 101-102, 226, 289, 355
Espir, M.L.E., epileptic drivers 449
ESRO-II satellite, experimental programme 10
launching problems 525
Eurocontrol air traffice control centre (Brétigny) 134, 356
European Southern Observatory telescope, silica reflector for 623
European Space Research Organization, launching problems 525
Exhausts, car, effect on weather 33
Export of animals, Bill for 253
Extatosoma tiaratum, rearing in artificial conditions 525
Eye, insect, structure of 547
measurement of colour differences 94
pupil in, and mental state 6

Factory cosmetics, last word on 657
Farming, indiscriminate use of drugs 5, 101, 226
Fatigue, of leaf springs 20
test monitoring by computer 78
Ferrite memory cores, manufacture of 609
Fertility hormones, research progress 414
Fibre, synthetic, segmented polyurethane elastomer 205
Filtering of smelly air 400
Fire hoaxers, alarm horn deterrent 254
Fires, forest, infrared scanners for detection 397
Fish, "instant", for mosquito control and food source 42
protein concentrate 614
Flash photolysis, flow pattern investigation by 204
Flies, onion plant pollinization by 142
Flight, man-powered, new regulations for 524
Flow pattern investigation by flash photolysis 204
Fluids, electric field manipulation of 664
Food, bodily distribution of 473
instant, research and development 352
Food and Agricultural Organization, aiding of underdeveloped countries 625
Food-from-the-sea programme, United States 614
Food production, India 408
Foodstuffs, aflatoxin test for 158
Ford Foundation's wheat programme for Pakistan 668
Foreign students in British universities 153
Forest fires, infrared scanners for detection of 397
Forgeries, art, new detection techniques 622
Forging press, development of ultra-high pressure 450
Fossils, new discovery in Kenya 207
of mammals, new discoveries 534
France, hovertrain development 30
Friction, of metals, effects of 273
reduction of, by iodine and oil 540
Fruit trees, virus-tested 145
Fungi, mosquitoes control by 282
wheat, mild weather growth 387
Furnaces, electric arc, ERIC controller for 203
Furniture, inflatable, last word on 73
paper, manufacture and testing of 320

Gallium arsenide, Gunn effect in 205
Garbage disposal, automatic 255
Gas turbines, industrial and marine development 468
nuclear reactor coolant driven 401
Gases, smelly, decomposition of 400
General Post Office survey by Select Committee 445
Generator, electrogasdynamic, design and development of 615
Genes, reactivation of 678
Genetic abnormalities, effect on criminal behaviour 524
Genetics, influence on human behaviour 191
Geographical influence on animal species 546
Geology of ocean basins 219
Germany's reactions to non-proliferation treaty 677
Gerontology and market research 160, 291, 481
Gibbons, behaviour studies of 655
Giraffe, lone life of 191
Glass wool, plant growth in 670
Glutathione effect on taste and smell 448
Gold, deposits forecast by computer 203
replacement by fissionable materials 288
Gondwanaland, area of super-continent 226
Good neighbours (film) 620
Goonhilly, second aerial 459
Gottorp Globe, ancestor of Planetarium 599
Grafting of organs, anti-lymphocytic serum for 220
Grains, comet-shaped, in cast structures 202
Gravitation, measuring forces of 265, 419
Great Lakes, pollution of 598
Greenhouse, artificial light requirements 330
Gregorian calendar, rearrangement proposals 98, 227
Ground Power Unit, housed underground 537
Gunn effect, DOFIC devices 205
in gallium arsenide 205

H39 cell, smallest strain of molecule 256
Haddow, Sir Alexander, chemical cancer treatment hopes 45
Hadza (film) 284
Haemoglobin sickle, research on solubility 471
Handicapped children, education in Czechoslovakia 345
Hartuft Carpet, low-price hardwearing 671
Haskin, C.P., Carnegie Institution report 18
Hatfield College of Technology, supersonic wind tunnel, correction 145
Heads, stone, discoveries in West Riding 129
Heart, radioisotope-powered, "pacemaker" 331
Heart failure, research investigation 275
Heat-exchanger, air-flow measurement through 610
Heat generation control in machine tools 83
Heat-resisting plastics, phosphorus-nitrogen structure in 94
Heating, central, from lights 255
Helical warping capstan 83
Helicopter. See Aircraft
Helium, liquid, existence of quantum in 678
Herbivores productivity prospects 541
Heredity (film) 35
High energy rate forming of powdered metal 538
Holograms by cheaper illumination 461
Holographic nature of memory 221
Holography, ordinary light method 202
Holub, Miroslav, poems of 229
Honesty pill, last word on 449
Honolulu, tsunami information centre 668
Hormones, fertility, research progress 414
Horses, "humanising" treatment of 76
Hospital bed, design and development of 463
Hovercraft, discs in place of curtains 399
for military use 674
future development 527
Hovertrain development in France 30
Human cells for vaccine production 386
Hydrolift conveyor for solids as suspensions in water 142
Hydroxyl radical formation in solar system 146

'Icaronycteris index', bat 8
Icing test rig for helicopters 203
Ilkley Moor, vegetationless 598
Illuminated teeth, last word on 9
Inch/metric measurement conversion rule 148, 289
Incralac lacquer for copper tarnish prevention 272
Indata electronic equipment information bureau 452

India, ancient civilizations, evidence in Vedic literature 387
population growth and scientific prospects 384
science and technology developments 408
Industrial espionage. See Espionage
Industry, and universities, Liverpool experiment 70
Infant malnutrition 221
Inflatable furniture, last word on 73
Information services, industrial, Russia 192
Infrared scanners for forest fire detection 397
Infrared senser for weld penetration 610
Insects, eye structure 547
pest control by antibiotics 656
population growth control 622
Instant foods, research and development 352
Instruments, surgical, transparent to X-rays 461
Intelligence, deficiency disease and 72
effect of diet on 356
survey of scientists 318, 684
Interferon, virus growth inhibition 342
Internal combustion engine, using light or heavy fuel 397
Interplanetary dust, research on 464
Iodine and oil, reduction of friction by 540
Ionosphere, sound waves observation 282
Isaacs, A., death of 288
Islands reclaimed for World Fair 1967 (Montreal) 539
Israel, canal building proposals 448
oil pipeline proposals 448

Japan, Antarctic research 217
brain drain 217
colour television 217
elephant fossil findings 599
skyscraper construction 40
Jupiter, experimental projects review 197
radio emission 413
spaceflight problems of 137

Kangaroo pouch-young transfer effects 151
Kapitza, P., freedom of discussion 349
Kasumigaseki building, Japan 40
Kenya, new fossil discovery 207
Kerr, C., dismissal from University of California 189
Key Callmaker automatic telephone calling device 81
King Arthur. See Camelot
King's Cross underground station, tunnel sealing technique 20

Lacquer, Incralac, for copper tarnish prevention 272
Lake Victoria, Tilapia depletion 44
Lamb, meat tenderness experiments 82
Landscaping of M74 motorway 271
Landslides, air cushion support theory 9
Larynx, diseased, speech waveform analysis for diagnosis of 146
normal and diseased (film) 620
Laser beam modulation by lithium tantalate crystal 143
Laser beams, document recording 82
eye disease treatment 679
high speed colour change 462
self-focusing mechanism 151
through liquid, effects of 411
Laser tracking, Diademe satellite for 386
Lasers, as aids to chemistry 329
chemical-powered 472
CO_2, growth of algae in machines 550
energising by machine gun 221
Laurasia, area of super-continent 226
Leaf springs, fatigue stress of three-layer steel 20
Learning, memory and, physiological factors 80, 355
Leather, artificial, for shoe uppers 618
Lectures, comment on 680
Lens development by computer, cost reduction 271
Leonardo da Vinci, discovery of manuscripts 454, 630
Leukaemia, radiation treatment of Burkitt's tumour as cause of 343
Libraries, electronics for 386
Life, nature and origins of 12, 160, 227, 356, 358, 481
origin of, and struggle with death 86, 358, 481
Lighting columns, breakaway 85
Lights, central heating from 255
night, last word on 257
Limbs, artificial, research on 135
Linen, research and proposals for 637

Liquid metal, bubble blowing process 611
Lithium tantalate crystal for laser beam modulation 143
Liverpool University, Design Study Group 70
Lobster catching by cable from shore 460
Locomotives, wheel slip in, treatment by plasma flame 669
London Airport, (Heathrow), helicopter service to Waterloo 127
(Stansted) 320
Longevity factors in Azerbaijan 656
LSD, effects of 479
on chromosomes 657
Lubricant for cold drawing of refractory metals 22
Lunar dust, controversy over Surveyor I photograph 96
Lunar Orbiter I, incentive awards 349
Lunar samples, U.K. scientists' test on first 668

M74 motorway, landscaping of 271
Machine tool industry, government support for 45
production prospects 387
Machine tools, heat generation control 83
Macrostella gracilis, effects of algae on 473
Magnetic cooling, use of ruby 471
Magnetic engine, research and development of 332
Magnetic field effect, of electronic beam 471
on enzyme reactions 93
Malaria, sulpha drug control 384
Malnutrition in children 221
Mammals, evolution of 534
of Western Europe 163
Mammoth, history of 71
Man-powered flight, new regulations for 524
Management of research and development 104
Manpower, scientific and technological 101
Market research, gerontology and 160, 291, 481
Mars, photography of 221
Marsupials pouch-young transfer effects 151
Massachusetts Institute of Technology, collaboration with industry 346
Mathematical attainment, UNESCO survey on 526
Mathematics, children's attitude to learning 45
'Mathematics in the Primary School' 7
McNamara, R.S., technological gap 474
United States defence costs for 1967 340
Meat shortage in Africa 625
Medical research, results and effects 550
Medical research council of India, studies of 408
Megalithic monuments, observations for time-keeping 226
Memory, and learning, physiological factors 80, 355
and protein synthesis 34
holographic nature of 221
Memory cores, ferrite, manufacture of 609
Mesons, discovery of new 624
Mesothelioma, association with asbestos dust 453
Metal coatings, stripping by electrohydraulics 400
Metal crystals cutting machine using terylene thread 610
Metal friction, effect of 273
Metals, explosively-impacted, formation of waves 412
liquid, bubble blowing process 611
powdered, HERF compacting of 538
Methamphetamine, effects of 599
Metric/inch measurement conversion rule 148, 289
MHD comparison with aerosol generator 254, 420
Mi 10 helicopter, demonstration of 602
Mice, agonistic behaviour 679
Microbial hazards of space travel 152
Microbiological oxidations of steriods 623
Microcircuits, large-scale integrated 671
Micro-logic circuits, chemical plant use of 269
Microtus montanus, vole, diet effect on reproduction of 342
Microwave therapy, sand as aid to 219
Millom Hematite Ore and Iron Co., spray steelmaking 523
Minerals, emitting of rays under pressure 545
Minsk 22 computer for Czechoslovak food industry 84
Missing-mass spectrometer discovery of new mesons 624
Mixing, research into 334
Molecules, and men 359
reaction under pressure 283
repressor, isolation of 322
smallest strain of 256
Molluscs, behaviour studies 319, 556
Molten materials, temperature waves in 552
Monkeys, punishment effect in training 254, 482
Moon, activity signs on 74, 290, 291, 419, 420, 556
correction 227
crater formation 263
declination of, stone alignment and 32
origins of 472
surface of 292
Surveyor I pictures of 96
Moor, Ilkley, vegetationless 598
Morowitz, H., cell H39 molecule 256
Mosquito control, by fungi 282
by "instant" fish 42
Moth, black Peppered, frequency and environment 44
Motorways, accidents on, effect of speed limits 628
M74, landscaping of 271
mini-sized 446
Mummies, dental X-rays of 614
Music, mystery of 356
Mute swan, noise in flight 44
Myotis lucifugus, homing instincts of 545
Myotis sodalis, homing instincts of 545

Nasutitermes existiosus termites, tracking down by scent 398
National Institute of Oceanography (Goa), formation of 408
National Research Development Corp., dental porcelain 446
Naumann species of elephant, fossil findings in Japan 599
Near East, water supply problems in 625
Nerve activity, examination of 411
Nervous system, spider's web structure related to 606
Network, communication, for solar system 679
Night lights, last word on 257
Niobium, refining of 331
Nitrogen, atmospheric, fixing of compounds 473
Noise, aircraft, problems of 72
jet engines, reduction of 320
testing human reaction to 219
Non-Destructive Testing Centre, activities of 258
Non-proliferation treaty, Germany's reactions to 677
North America, future environments of 631
Nuclear industry, position and prospects of 69
Nuclear magnetic resonance 33
Nuclear magnetic resonance spectroscopy 152
Nuclear merchant ship, 'mothballed' 253
Nuclear power, cost reduction prospects 321
replication policy proposal 90
Nuclear power stations, building programme 321
Nuclear reactor coolant, gas turbines driven by 401
Nuclear rocket, Rover, proposals for building 549
Nuclear rocket reactor, Phoebus 1B 474
Nuclear submarine, present day warfare 456, 629
Number plates, new safety recommendations 225

Ocean exploration, sonar transmitters for 142
Ocean temperatures, changes over 15 years 95
changes over 3000000 years 95
Oceanography, report of National Academy of Sciences 549
Oceans, geological research 219
Odours, filtering of 400
Olfactory sport, last word on 601
Olympic Games, Mexico, training restrictions for 448
One-Eleven short-haul airliner, BAC,"stretched" version 9, 290
Onion, sclerotia germination of 343
Onion plant pollinization with flies 142
Opals, synthetic 21
Orbiting mirror proposal, Project Able 127, 146
Organic Mass Spectrometry (film) 284
Organisation for Economic Cooperation and Development, schools in UK (report) 191
Ornithological studies in London and New York 385
Orthopaedic casts, synthetic rubber for 611
Ortix artificial leather 618
Oxford Circus underground station, tunnel sealing 20
Oxygen-meter for boiler-water 610

Pacemaker radioisotope-powered heart 331
Pakistan, electrical energy supplies 100
water supplies 100
Panda, review of 46
Paper clothes, practical use of 319
Paper dart competition 153, 482
Paper furniture, manufacture and testing of 320
Papermaking, new process of manufacture 213
Particle accelerator, building proposals for 533
PCM. See Pulse code modulation
Pennsylvania University, biological warfare research 668
Pesticides, digestion by soil 6
safety arrangements 264
Petrochemicals, from carbon monoxide 385
industry development 156
Petroleum products, chemicals as 156
Philately, last word on 131
Phoebus 1B nuclear rocket reactor 474
Phosphorescent wheel, sightings 447
Phosphorus-nitrogen structure in heat-resisting plastics 94
Phylogenetic trees, development of 341
Piano keyboard, electronic equipment for 462
Pictorial information handling by computer 205
Piercing method for tube manufacture 141
Piezoelectricity in bone and animal and plant tissues 219
Pig breeding, coordinated 22
Pipelines, use of buoys for terminals 400
Planar turbulence amplifier 143
Planetarium, Denmark reopen ancestor of 599
Plant cell examination by freeze-etching techniques 658
Plant growth, in glass wool 670
wind measuring device for effect on 143
Plasma flame, wheel slip in locomotives treatment by 669
Plasma sheath for aerials for better tuning 401
Plastics, heat-resisting, phosphorus-nitrogen structure in 94
Plowden report on children and their primary schools 70
Political division, last word on 321
Politics of science, long-term view 69
Pollution, Great Lakes 598
rivers in Czechoslovakia 345
Polystar X-414 for orthopaedic casts 611
Polyurethane printing rollers, development of fungi on 269
Population expansion, death rates and 34
Population growth and scientific prospects, India 384
Post Office. See General Post Office; Telephone
Potatoes, chitting for increased yield 462
Pouch-young transfer effects 151
Prehistoric animals, theories on growth 447
Premonitions, study of 288
Primary schools, children and, Plowden report on 70
mathematics in 7
Printing rollers, polyurethane, development of fungi on 269
Prismatic molecular structure 220
Project Able, orbiting mirror proposal 127, 146
Property, effect of people's possession of 479
Protein, algae source of 270
from the sea, research proposals 276
correction 556
synthesis, cellular control of 322
memory and 34
three-dimensional structures, functions of 528
Proton bombardment effect on superconductors 93
Proton charges and quarks 413
Proton synchrotron, 300-GeV, planning and building of 533
Pruning trees by helicopter 84
Psychoactive drugs, social use studies 128
Puccinia striiformis, wheat fungus mild weather growth 387
Pulse code modulation installation, telephone exchange 397
Pump, reciprocating-jet, for sensitive fluids 613
Pupil in eye and mental state 6

Quantum in liquid helium 678
Quarks, theory of 413

Radar, bird identification by 19

Radiation treatment of Burkitt's tumour as cause of leukaemia 343
Radio and television, noncommercial, US Congress recommendations for 549
Radioactive particles, dating cosmic rays by 389
Radioactive waste disposal in rock 84
Radiocarbon, whisky age testing by 655
Radioisotope-powered heart, "pacemaker" 331
Railways, underground, automatic control of 669
Rats, worker/eater behaviour studies 344
Refractory metals, lubricant for cold drawing of 22
Refrigerator, helium-3-helium-4 460
ruby in magnetic cooling of 471
Relativity, Sun's shape effects on 326
Reliability of products (film) 620
Repressor molecule, isolation of 322
Research and development, management of 104, 222
Research establishments, government, liason with universities 523
Research organization in very big industry 475
Reservoir, Cow Green project 392, 555
Retinas, ultrasonic welding of 670
Rheumatism, vitamin E and steroid therapy for treatment of 622
Ribonuclease, elucidation of 528
Rice crop, sown from the air 144
Rice yield, Asia 398
Ring-compound 24-annulene 152
River Thames, scheme for increasing flow 467
Rivers, polluted, in Czechoslovakia 345
RNA, in viruses 93
Road accidents, statistics on 225
Robot diver for sampling seabed 401
Rock drill, rocket-powered 130
Rocket, Rover nuclear, proposals for building 549
Rocket engine, "aerospike" 20
Rocket fuel, human waste as use for 270
Rocket-powered rock drill 130
Rocket reactor, nuclear, Phoebus 1B 474
Rodents, breeding regulation by social interactions 412
Rosenberg, J. and E., H-bomb secrets case 92
Rotary engine, development of new 609
Route 128 ring road system, Boston, Mass. 346
Rover nuclear rocket, proposals for building 549
Royal Institute of Chemistry, conference on education of chemists 72
Royal Microscopical Society, meeting on plant cells 658
Royal Society, new Fellows 628
recommendations on Civil Service 523
Ruby in magnetic cooling of refrigerator 471
Rule for inch/metric measurement conversion 148, 289
Russell, Bertrand, life and works of 687
Russia, industrial information services 192
space programmes, Apollo disaster effects on 324

Sailing boats, research on 201
Sandblasting machine, ceramics cutting by 538
Satellites, balloon, Project Able 127, 146
communications, development position 132
Diadème, for laser tracking 386
ESRO II, experimental programme 10
launching problems 525
UK-3, launching problems 525
Saturn, new satellite of 95
Savannah nuclear merchant ship 'mothballed' 253
Schizophrenia, control progress 261, 420
'School Approach to Technology' 7
School magazine, 'Enquiry' 550
Schools, computer programming in 36
in UK, OECD report 191
primary, children and, Plowden report on 70
mathematics in 7
windowless, construction of 613
Science, and technology in India 408
financial backing of 600
in universities, M. Swann 101
of security 101-102
politics of, long-term view 69
Science of Science Foundation, activities of 653
Scientific and technological manpower 101
Scientific methods, ruthless enquiry into 356
Scientific research and information explosion 626
Scientists, creativity and assessment of 416, 481
emigration to US, advertisement 383, 420, 629
for industry, recruitment from universities 446, 630
intelligence survey 318, 684
Scorpion, nervous cycle 526
Scrapie sheep disease 190
Sea, protein from the, research proposals 276
correction 556
Sea water, steady state of 199
Seabed sampling by robot diver 401
Seal, Crab-eater 130
Sealing, tunnel, for underground stations 20
SECAR air traffic control system 612
Security, science of 44, 101-102, 289
Seismology information on Earth's interior 530
Select Committee on Nationalized Industries, survey on GPO 445
Sewage at sea, tracking of 273
Sex education for eight-year olds (film) 620
SHAB principle, research into 663
Shaving, last word on 527
Sheep, productivity prospects 541
Sheep disease, scrapie 190
Ship model laboratory 654
Shipbuilding, research in 654
Shipping industry, position and prospects of 193
Ships, automatic transfer of loads at sea 398
nuclear merchant, 'mothballed' 253
Shoe uppers, artificial leather for 618
Shower, electric 70
Shrew. See Tree-shrew
Siberia ancient civilisation 526
Single crystals, cutting machine using terylene thread 610
optical mixing processes 609
Skin disease, effects on internal functions 131, 290
Skin grafts, spermatozoa injection effects on 412
Skyscraper construction, Japan 40
Sleep glasses, electrical pulse instrument 399
Sleep inducement by electrical pulses 399
Snail, study of species 473
Sodium, non-conductor research 283
Soft and hard acids and bases, principle of 662
Soil digestion of pesticides 6
Solar cooker 144
Solar radio, fluctuation of voltages 341
Solar system, communication network for 679
hydroxyl radical formation in 146
Solid suspensions in water, Hydrolift conveyor for 142
Sonar transmitters for ocean exploration 142
Sonic boom, intrusion on nature 207
Sound waves observation in ionosphere 282
South Africa, Unesco report on apartheid in 479
Space flights to Jupiter, problems of 137
Space programme proposals for space agency 445
Space research, US budget effects on 268
Space telecommunications (film) 35
Space travel, microbial hazards 152
Spastic, what is a? (film) 284
Speech synthesis, vocal tract model for 22
Speech waveform analysis for diagnosis of diseased larynx 146
Spelling reform proposal 482, 630
Spermatozoa injection, effects on skin grafts 412
Spermidine, disease inhibiting agents 623
Spermine, disease inhibiting agents 623
Spiders, spoon, life of 256
Spider's web pattern as research aid 606
Spin-coupling, nuclear magnetic resonance studies 33
Spoon-spiders, life of 256
Sporotrichum Sulphurescens, ATCC 7159, oxidations of molecules with 623
Spray steelmaking system 523
Spraying, aerial, using Decca Navigational system 447
Springs, leaf, fatigue stress of three-layer steel 20
Stansted. See London Airport (Stansted)
Star reflection, long-period waves detection by 399
Steady state of air and sea water 199
Steelmaking, spray system 523
Steroid therapy, vitamin E and, for treatment of rheumatism 622
Steroids, microbiological oxidations of 623
Stick insects, rearing in artificial conditions 525
Stone alignment and Moon's declination 32
Stone head discoveries in West Riding 129
Strawberry plants, carbon protection 204, 355
Street lighting columns, breakaway 85
Stress (film) 284
Students, foreign, in British universities 153
university, protection from intrusion 681
recruitment for industry 446, 630
Submarine, nuclear, present day warfare 456, 629
Submarine fiction, last word on 388
Sugar, effects on coronary thrombosis 542
Sugar compound, effect on tooth decay 613
Sulformethoxine, malaria controlling drug 384
Sunlight wavelengths, effects on wool 611
Superconduction, technology of 24
Superconductors, effect of organic molecules 220
energy storage by trapped flux in 92, 289
high-field 24
proton bombardment effect on 93
Super-continents, areas of 226
Superinsulation 27
Supersonic wind tunnel, Hatfield College of Technology, correction 145
Surgical instruments transparent to X-rays 461
Surveyor I spacecraft, Moon pictures by 96
Suspension springs, fatigue stress of three-layer steel 20
Swan, mute, noise in flight 44
Swann, M., "centres of excellence" 101
Symmetry law, "CP", for particle interactions 624
Synthetic fibre, segmented polyurethane elastomer 205
Synthetic rubber for orthopaedic casts 611

Tankers, use of buoys for terminals 400
Tape Callmaker automatic telephone calling device 81
Taxonomy, numerical 418
Teaching machines, dangers of 317, 555
Technological and scientific manpower 101
Technology, financial backing of 600
Ministry of, diversifying research plans, for Harwell 383
fusion of Ministry of Aviation with 320
School Approach to 7
Teesdale, Cow Green reservoir project 392, 555
Teeth, cocoa inhibiting effect on 670
decay, effect of sucrose phosphates 613
illuminated, last word on 9
vanilla inhibiting effect on 670
Telecommunications, space (film) 35
Telephone, automatic calling devices 81
world growth rate statistics 128
Telephone exchange, pulse code modulation installation 397
Telescope, European Southern Observatory, silica reflector for 623
Television, and radio, noncommercial, US Congress recommendations for 549
colour, for X-ray image subtraction technique 23
Japan 217
colour translation of different systems 461
Temperature oscillations in molten materials 552
Tennis balls, pressureless 201
Termites, tracking down by scent 398
Terylene thread for cutting metal crystals 610
Textile industry, research and development 279
Thames, River, scheme for increasing flow 467
Threshing machine, film of flow pattern 459
Tilapia depletion in Lake Victoria 44
Time-keeping with megalithic monuments 226
Toad, species of 220
Tobacco plant, aphid resistance 343
Tomato cultivation, in tiered troughs 672
using peat-filled plastic hammocks 672
Tonsil removal, child victims of 153
Tooth. See Teeth
Toothpaste, luminous 9
Transport, national plan research 189
Transport system proposals in "big city" 208
Transport vehicle, tubular, with aerodynamic lift 333
Treaty, non-proliferation, Germany's reactions to 677
Tree-shrew, Asian, breeding pattern of 661
Trees, fruit, virus-tested 145
pruning by helicopter 84
Tsunami information centre, formation of, Honolulu 668
Tube manufacture, piercing method for 141
Tuna fish, body temperature 151
Tunnel sealing for underground stations 20

Turbine, gas, development for industrial and marine use 468
Turbulence amplifier, planar 143
Turbulent Peace (film) 620
Tuttle's comet, observations on 655

UK-3 satellite, launching problems 525
Ulster linen, prospects of 537
Ultrasonic welding of retinas 670
Unborn baby, effect of viruses on 654
foetal therapy applied to 194
Undercarriage, swivelling, for jumbo jet aircraft 129
Underdeveloped countries, activities 625
Underground railways, automatic control of 669
Underground stations, tunnel sealing for 20
UNESCO, mathematical attainment survey 526
report on apartheid in South Africa 479
United States, budget effects on space research 268
defence programme costs for 1967 340
Department of Housing and Urban Development, research grants 474
food-from-the-sea programme 614
National Acadamy of Sciences review of report on Oceanography 549
National Aeronautics and Space Administration, welding of aluminium alloys 599
space programmes, Apollo disaster effects on 324
supersonic transport aircraft, Boeing-GE 96
Universities, and government research liaison 523
and industry, Liverpool experiment 70
foreign students in 153
science in, M. Swann 101
vacant places in science and technology 597
University students, foreign, in British universities 153
protection from intrusion 681
recruitment for industry 446, 630

Uranium concentration measurement techniques 546
Uranium plant for Spain 329
USAEC, diffusion plant disposal consideration 146

Vaccine production on human cells 386
Vanilla, inhibiting effect on teeth 670
Vehicle automatic check-out equipment 81
Velacumantis australis, study of species 473
Venus, ground/cloud temperature disparity theories 32
Virus growth, inhibition with interferon 342
on animal tissues 386
Virus-tested fruit trees 145
Viruses, effect on unborn baby 654
RNA and DNA in 93
Vision, effect on senses 404
Visual displays, for relieving strain on senses 404
research on 404
Vitamin E and steroid therapy for treatment of rheumatism 622
Vitamins, algae source of 270
Vocal tract model for speech synthesis 22
Vole, diet effect on reproduction 342

Wallabies pouch-young transfer effects 151
Wallis, B.N., portrait of 192
Warfare, biological research, Pennsylvania University 668
chemical and biological 196
underwater, effects of 456, 629
Warping capstan, helical 83
Wasp, cicada-killer, human being as territory 34
Water, hardness effect on cardiovascular disease 318
Water supplies, Africa 625
atmospheric sources 207
Near East 625
Pakistan 100
River Thames flow increase project 467
Wave formation between metals 412
Waveform, speech, diagnosis of diseased larynx 146
Waves, long-period, detection by star reflection 399
Wear protective coatings 671
Weather, car exhaust effects 33
Weather Watch, World 7
Wechler Adult Intelligence Scale 318
Weld penetration, infrared senser for measuring 610
Welding, of aluminium alloys 599
ultrasonic, of retinas 670
West Pakistan, wheat production in 668
West Riding, stone head discoveries in 129
Wheat crops, CCC chemical treatment 333
Wheat fungus, mild weather growth 387
Wheat production in West Pakistan 668
Wheel slip in locomotives, treatment by plasma flame 669
Whisky, age testing by radiocarbon 655
Wild life, conservation of 7
Wind measuring device for effect on plant growth 143
Wind tunnel, supersonic, Hatfield College of Technology, correction 145
Windowless school, construction of 613
Windscreen wipers, one-way movement of 462
Wool, sunlight wavelengths effects on 611
World Fair 1967 (Montreal), islands reclaimed for 539
World Weather Watch 7

X-ray image subtraction technique, colour television for 23
X-rays, dental, of mummies 614
development of surgical instruments transparent to 461

Yachts, research on 201
Yarn tension control device 21
Yarn twisting, air as aid to 272
Yellow rust, mild weather growth 387

Zinc test for diagnosis of cancer 152
Zodiacal light, research on 464

AUTHOR INDEX

Agnew, W., review of 'Deep Fix' 230-231
review of 'Symmetrians' 230-231
review of 'Twilight Man' 230-231
review of 'Universe Between' 230-231
Agrawal, H. Unending battle 408
Allnutt, M.F. See Rolfe, J.M. and Allnutt, M.F.
Annett, J. Gentle teaching machine (Letter) 555
Ashby, Sir Eric. Can education be machine made? 285

Barker, S.A. New factor in fertility 414
Beauchamp, R.S.A. Shrinking catch in Lake Victoria (Letter) 44
Bellamy, D.J. Pressing the Napoleons (Letter) 555-556
Bernal, J.D. Definitions of life 12
Origin of life (Letter) 481
Struggle with death 86
Blackwell, J.J. See Gebbie, H.A., Taylor, B.K., Blackwell, J.J. and Osborne, C.F.
Bond, A. Variations in the value "G" (Letter) 419
Bourne, J.R. Toward a science of mixing 334
Box, B. Success for loudmouth (Letter) 44-45
Bradley, J.E.S. Red Guards for revolution-3 419
Bragg, S.L. Making the punishment fit (Letter) 289-290
Brooks, J.R.V. review of 'An Outline of Crystal Morphology' 47
review of 'Photogeology and Regional Mapping' 632
Brown, N. Submarine warfare today 456

Calder, N. Matter of principle 687
Carter, W.T.H. Backing the machine tool men (Letter) 45
Cattermole, P. That old, devil-moon (Letter) 290
Chedd, G. Copying the cow 618
"Steady state" of air and sea water 199
Switch that controls life's shape 322
Clark, R.E.D. Definitions of life (Letter) 162
Clavering, E. Simple change in arrangement (Letter) 630
Cole, S. review of 'Territorial Imperative' 688
Comfort, A. Research on ageing (Letter) 291
Spying on Big Brother (Letter) 226
Cooper, N. Definitions of life (Letter) 358
Crabbe, J. Origin of life (Letter) 227
Cross, D.A.E. Observations at Stonehenge (Letter) 226-227
Crowther, J.G. review of 'Development of Technological Education in France, 1500-1850' 423
review of 'Galileo Galilei, his life and his works' 164
review of 'John Kepler' 562-563
Cruickshank, C.N.D. Research on skin (Letter) 290
Cummings, A.D. review of 'English Land Measuring to 1800 : Instruments and Practices' 105
review of 'Science Since 1500 - A Short History of Mathematics, Physics, Chemistry, Biology' 561-562
Currer-Briggs, N. Espionage and industry (Letter) 101-102

Dagnall, H. In defence of notes (Letter) 555
Dahl, N.B. Submarines and war (Letter) 629
Daventry, A.B.J. Brain drain again (Letter) 629
Delin, J. review of 'Ages of Science' 293
review of 'Outline history of Science' 293
review of 'Stories of Famous Scientists' 293
Dixon, B. Dangers in intensive farming (Letter) 226
Medicine for the unborn baby 194
Dixon, D. All that glitters... (Letter) 101
Research on ageing (Letter) 481-482
Druce, G. University entrance (Letter) 630
Dulat, J. Definitions of life (Letter) 162
Eysenck, H.J. Right test for the job (Letter) 684

Facey, P.V. Assessing intelligence (Letter) 481
Finniston, H.M. How the other half lives 104
Fishlock, D. Chat with your plant's computer 338
Do robots pay off? 15
Technology looks to the craft of the potter 394
Ultra-high pressure forge 450
Who will build the big machine? 533
Frazer, M.J. Soft and hard acids and bases 662

Gardener, W. Pressing the Napoleons (Letter) 555
Gardner, J.W. One for the red face department (Letter) 356
Gaskain, J.S.H. Fair cop (Letter) 44
Gaskell, T. Chemicals from "crude" 156
Gatland, K.W. Space-race after Apollo-204 324
Gebbie, H.A., Taylor, B.K., Blackwell, J.J. and Osborne, C.F. New rules for metrication 148
Giddey, C. and Menzi, R. Instant cuisine 352
Giles, R.E. Starting young with computers 36
Giuseppi, J.A. Espionage and industry (Letter) 102
Gladden, R.J. Flying molluscs (Letter) 556
Globig, F. von. Businessman's atom 677
Glossop, K.H. See Hallam, D.J. and Glossop, K.H.
Goodeve, Sir Charles. "Route 128" for Britain? 346
Gould, D. An antibody in schizophrenics 261
Dangerous dust 453
Molecules of memory 80
Gray, C.P.M. Definitions of life (Letter) 358
Griffin, G.J.L. Teaching maths (Letter) 45

Hall, D.A. Research on ageing (Letter) 160
Hallam, D.J. and Glossop, K.H. New rules for metrication (Letter) 289
Harchtaff, A.L. "How you gonna keep 'em?" (Letter) 420

Harper, K. Espionage and industry (Letter) 102
Harrison, C. Definitions of life (Letter) 358
Hearle, J.W.S. How research has paid off 279
Hellyer, F.G. Yardstick for profitable research 222
Herbert, R. review of 'Energy into Power' 558-559
review of 'World of Nuclear Powers?' 47
Hermann, A. New look in school 345
Hibbs, J.A.B. Definitions of life (Letter) 162
Hillaby, J. Evolution under the dragon lava 534
Face that clicked a million turnstiles 46
People, pesticides and parliament 264
To hell with nature 631
Hoole, G.P. Darting ahead (Letter) 482
Hope, Sir Archibald. Aircraft success story (Letter) 290-291
Howlett, B. Primeval continents (Letter) 226
Hughes, A.M. Science on film 35, 284, 620
Hull, R. Try it on the borer 158
Hume, R. Meat and meat-heads (Letter) 356
Hunter, B. New rules for metrication (Letter) 289
Hutchings, D. Seeking creativity in science 416

Ind, P. Music for the future (Letter) 356
Ironman, R. Short cut to papermaking 213

Jackson, J. review of 'Plastics as Corrosion-resistant Materials' 360
James, B. Definitions of life (Letter) 356-358
James, J.F. Interplanetary dust and the zodiacal light 464
Johnson, T. review of 'The Scientists' 564

Kahn, H. Aerotrain for commuters 30
Kennaway, A. Many skills combine to aid the cripple 135
Kidwai, A. Water and light 100
Kirby, E. Stuart. New calendar for a new age 98
Klass, D.L. Manipulating fluids with fields 664
Kneller, P.G. Safety over everywhere (Letter) 356
Knowles, G. Research on ageing (Letter) 481
Kurti, N. Centres of excellence (Letter) 101
Hemlines and temperature (Letter) 45

Lillie, H. Cosmetic danger (Letter) 355
Low, I. The fight goes on 625
Safety over Europe 134
"Unmentionable" warfare 196
Lyttleton, R.A. Out there 422

MacConnaill, M.A. Definitions of life (Letter) 160-161
MacLeod, N.A. Genesis of the Claymore (Letter) 44
Marsh, J.C. Inner life of the Moon (Letter) 291
Marwick, C. Towards a more "human" horse 76
Mellanby, K. A damp squib 626
Menzi, R. See Giddey, C. and Menzi R.
Miller, L. Topping up the Thames 467

Mills, J.N. Keeping in step - away from it all 350
Mitchell, G. "How you gonna keep 'em?" (Letter) 420
Monroe, A.G. Superinsulation 27
Montague, B.W. Teaching grandmother (Letter) 555
Moore, C.E. Is the Moon dead or alive? (Letter) 419-420
Moore, P. Armagh Planetarium (Letter) correction 630
Deciding about the Moon 292
review of 'Facing the Universe' 559-560
Transient lunar phenomena (Letter) 556
Moore, P.D. Definitions of life (Letter) 162
Moresi, A. review of 'Excursions in Number Theory' 688

Northcote, D.H. Electron microscopy of frozen specimens 658

Osborne, C.F. See Gebbie, H.A., Taylor, B.K., Blackwell, J.J. and Osborne, C.F.

Pamplin, B. Waves of temperature 552
Perutz, M. Conversation with 528
Poynder, A.J.I. Hovercraft for military use 674

Quelon, F. Dedecorated English (Letter) 482

Reed, C.F. Way of a weaver 606
Reeve, R. Help for the farmer (Letter) 101
Ridpath, I. Are the Moon's craters volcanic? 263
Ringwood, A.E. New light on the Earth's interior 530
Robinson, C. All that glitters... (Letter) 101
Roderick, M. Definitions of life (Letter) 162
Rodgers, P.D. Rearing of the shrew 661
Rolfe, J.M. and Allnutt, M.F. Putting man in the picture 404
Ross, H.R. New transport technology for the big city 208
Rothschild, Lord. Research in a very big industry 475
Russell, J. Interest in Antarctica 217
Japan's first skyscraper 40
Ryan, P. Greatest joke of all 558

Salaman, M.H. review of 'Comparative Leukaemia Research' 229-230
Schalk, J. Spying and the industrial cold war (Letter) 355
Settle, H.L. Dipping eggs for longer life (Letter) 291
Sharpe, R.S. Diagnostics for the engineer 258
Shepherd, E. Colston. Down to earth with the jet engine 468
review of 'Flight' 292-293
'Sky-hooks' on the grand scale 602
Shepherd, W. Nature of memory (Letter) 355
Sheppard, P.M. Putting up a black on Merseyside (Letter) 44
Slesser, M. Last things first 536
Smith, C.A.B. New calendar (Letter) 227

Staffard-Clark, D. Ageing and the human predicament 480
Stephenson, L.M. Gravitation: constant or variable? 265
Stewart, I.N. Ahem! or this has gone far enough (Letter) 227
In defence of 'duplicated notes' (Letter) 684
Strickland, J.D.H. Between beakers and bays 276
correction 556
Strong, J. Tricky road to Jupiter 137
Stubbs, P. Coming to grips with Jupiter 197
ESRO's first satellite 10
General relativity in the dock 326
Is the Moon dead or alive? 74
correction 227
Plans for big British electron microscopes 604
Way to date cosmic rays 389
Stungo, R. review of 'DNA - Ladder of Life' 560-561
review of 'Modern Genetics' 560-561

Taylor, A. Computers will stress the Concord's frame 78
Taylor, B.K. See Gebbie, H.A., Taylor, B.K., Blackwell, J.J. and Osborne, C.F.
Taylor, J.G. It's still rough on the monkeys (Letter) 482
Thomas, J.D. Strawberries of old England (Letter) 355
Tinker, J. Here be tigers 163
Lesson for conservationists 392

Ubbelohde, A.R. Should universities be cut off from the world? 681

Vanderplank, F.L. Why not "instant fish" farms? 42

Waine, P. Replicate for cheaper nuclear power 90
Welford, A.T. review of 'Acquisition of Skill' 359-360
Wheeler, F. Faith of an atheist 359
Keeping up with electronics 452
Relay stations in the sky 132
Scientist's eye 229
Whisson, M. Simple change in arrangement (Letter) 630
White, C. Biological rhythms in Man (Letter) 481
Wigglesworth, V.B. review of 'Insect Hormones' 164
Wilkins, R.W. Well and truly tripped (Letter) 630
Wintour, C. Raising hopes about cancer (Letter) 45
Wood, M. High-field superconductors 24
Woods, J. review of 'Introduction to Hydrometeorology' 105
Wraight, P.C. Our unwound friend - Daedalus (Letter) 289

Yerrell, J. Stuart. Harnessing and electrified wind 615
Power from the "grapefruit" (Letter) 420
Youngs, B.K. Fasting and schizophrenia (Letter) 420
Yudkin, J. Sugar and coronary thrombosis 542

BOOK INDEX

'Acquisition of Skill' ed. by E.A. Bilodeau 359
'Advances in Astronomy and Astro-physics. Vol.4' 422
'Ages of Science' by C. Ronan 293
Allum, J.A.E. 'Photogeology and Regional Mapping' 632
Anderson, J.T. See Ogilvey, C.S. and Anderson, J.T.
Ardrey, R. 'Territorial Imperative' 688
Armitage, A. 'John Kepler' 562
Artz, F.B. 'Development of Technological Education in France, 1500-1850' 423
'Autobiography of Bertrand Russell, 1872-1914' 687

Bilodeau, E.A. (Ed.) 'Acquisition of Skill' 359
Bishop, A.C. 'Outline of Crystal Morphology' 47
Bromley, D.B. 'Psychology of Human Ageing' 480
Bruce, J.P. and Clark, R.H. 'Introduction to Hydrometeorology' 105
Buchan, A. (Ed.) 'World of Nuclear Powers?' 47

Clark, R.H. See Bruce, J.P. and Clark, R.H.
Colvin, J. 'Deep Fix" 230
'Comparative Leukaemia Research' ed. by G. Winqvist 229
Corbet, G.B. 'Terrestrial Mammals of Western Europe' 163
Crick, F. 'Molecules and Men' 359

'Deep Fix' by J. Colvin 230
'Development of Technological Education in France, 1500-1850' by F.B. Artz 423
'DNA - Ladder of Life' by E. Frankel 560

'Energy into Power' by E.G. Sterland 558
'English Land Measuring to 1800 : Instruments and Practices' by A.W. Richeson 105
Evans, B. 'Plastics as Corrosion-resistant Materials' 360
'Excursions in Number Theory' by C.S. Ogilvey and J.T. Anderson 688

'Facing the Universe' by V.A. Firsoff 559
'Flight' by H. Guyford Stever and J. Haggerty 292
Frankel, E. 'DNA - Ladder of Life' 560
'Future Environments of North America' by J. Hillaby 631

'Galileo Galilei, his life and his works' by R.J. Seeger 164

Haggerty, J. See Stever, H. Guyford and Haggerty, J.
Harker, K. 'Symmetrians' 230
Hess, W.N., Menzel, J.A. and O'Keefe, J.A. (Eds.). 'Nature of the Lunar Surface 292
Hillaby, J. 'Future Environments of North America' 631

'Insect Hormones' by V.J.A. Novak 164
'Introduction to Hydrometeorology' by J.P. Bruce and R.H. Clark 105

'John Kepler' by A. Armitage 562

'Management of Research and Development' by J.E. Walters 104
'Men and Pandas' by R. Morris and D. Morris 46
Menzel, D.H. See Hess, W.N., Menzel, J.A. and O'Keefe, J.A.
'Miroslav Holub: Selected Poems' 229
'Modern Genetics' by H.P. Papazian 560
'Molecules and Men' by F. Crick 359
Moorcock, M. 'Twilight Man' 230
Morris, D. See Morris, R. and Morris, D.
Morris, R. and Morris, D. 'Men and Pandas' 46

'Nature of the Lunar Surface' ed. by W.N. Hess, D.H. Menzel and J.A. O'Keefe 292
Nourse, A.E. 'Universe Between' 230
Novak, V.J.A. 'Insect Hormones' 164

Ogilvey, C.S. and Anderson, J.T. 'Excursions in Number Theory' 688
O'Keefe, J.A. See Hess, W.N., Menzel, J.A. and O'Keefe, J.A.
'Outline history of Science' by W. Shepherd 293
'Outline of Crystal Morphology' by A.C. Bishop 47

Papazian, H.P. 'Modern Genetics' 560
Parkes, A.S. 'Sex, Science and Society' 558
'Photogeology and Regional Mapping' by J.A.E. Allum 632
'Plastics as Corrosion-resistant Materials' by V. Evans 360
Pledge, H.T. 'Science Since 1500 - A Short History of Mathematics, Physics, Chemistry, Biology' 561
'Psychology of Human Ageing' by D.B. Bromley 480

Richeson, A.W. 'English Land Measuring to 1800 : Instruments and Practices' 105
Ronan, C. 'Ages of Science' 293

'Science Since 1500 - A Short History of Mathematics, Chemistry, Biology' by H.T. Pledge 561
'Scientists, The' by G.W. Target 564
Scott, M. Maxwell. 'Stories of Famous Scientists' 293
Seeger, R.J. 'Galileo Galilei, his life and his works' 164
'Sex, Science and Society' by A.S. Parkes 558
Shepherd, W. 'Outline history of Science' 293
Sterland, E.G. 'Energy into Power' 558
Stever, H. Guyford and Haggerty, J. 'Flight' 292
'Stories of Famous Scientists' by M. Maxwell Scott 293
'Symmetrians' by K. Harker 230

Target, G.W. 'The Scientists' 564
'Terrestrial Mammals of Western Europe' by G.B. Corbet 163
'Territorial Imperative' by R. Ardrey 688
'Twilight Man' by M. Moorcock 230

'Universe Between' by A.E. Nourse 230

Walters, J.E. 'Management of Research and Development' 104
Winqvist, G. (Ed.) 'Comparative Leukaemia Research' 229
'World of Nuclear Powers?' ed. by A. Buchan 47

U. of ILL. LIBRARY
JUL 17 1967
CHICAGO CIRCLE

Digitized by the Internet Archive
in 2025

https://archive.org/details/new-scientist_january-march-1967_33_index